

## **REMARKS**

Claims 15-37 are currently pending. Claims 19, 26 and 31 are amended.

### **I. Rejections under 35 U.S.C. 112**

In the Office Action, claims 15-37 are rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. The Examiner alleges that claims 19, 28 and 31 recite a Markush group of pigments and it is unclear what are salt type (lakes) and condensation pigments and whether the pigments listed in parentheses are part of the Markush group or not. Claims 19 and 31 are amended to delete term "salt type" and "condensation" from the recitation of pigments and to delete the parentheses in the claims. These amendments are for clarification only and no new matter is added. In regards to claim 28, Applicants submit that the Markush group referred to by the Examiner in this rejection does not appear in claim 28. Applicants respectfully request clarification by the Examiner with regard to the rejection of this claim.

The Examiner alleges that claims 15, 16, 25, 29, 30 and 33-37 are indefinite because the bases for the weight percentages are not recited in the claims. Applicants submit that one of ordinary skill in the art of coating composition formulation would understand that when the amount of an ingredient in a coating composition is recited in weight percent, it is based on the total weight of the coating composition unless there is a specific indication to the contrary. Please refer to the Declaration of Jim Claar filed herewith which provides further evidence of this argument.

The Examiner further alleges that Claim 26 is ambiguous with regard to whether a resinous binder is present in both layers recited in the claim. Claim 26 is re-written in independent form to clarify the presence of a resinous binder in a first layer and a second layer. Support for this amendment is found in [0015] of the specification. This amendment is made for clarification only and no new

matter is added to the claim. Applicants submit that as-amended claims 15-37 overcome the rejection under 35 U.S.C. 112.

## **II. Rejections under 35 U.S.C. 102**

In the Office Action, claims 15-17 and 21-25 are rejected under 35 U.S.C. 102(b) as allegedly being anticipated by United States Patent 4,172,063 (O'Brill). The Examiner alleges that O'Brill discloses all limitations of claims 15-17 and 21-25. Applicants respectfully traverse this rejection.

Applicants submit that O'Brill discloses a reflective exterior marking composition (see column 1, lines 43-47). The composition contains fluorescent pigments that produce a glowing effect at nighttime when illuminated with black light and is highly visible during the daytime. The coating compositions are applied to cementitious substrates for highway and runway marking and metal substrates such as billboards and signs. The coating composition also includes glass fibre strands to provide tensile strength so that the composition resists cracking and peeling when applied to the substrate.

The coating composition in claim 15 of the claimed invention comprises a resinous binder with colorants and reflective pigments dispersed therein. The colorants absorb visible light at a first wavelength band and produce fluorescent light at a second wavelength band when exposed to visible light. When visible light strikes the colorants, a portion of the light is absorbed by the colorants. The non-absorbed wavelengths are reflected by the reflective pigments as reflected light (R). The absorbed wavelengths of light create an increased energy state in the colorants which is subsequently dissipated as fluorescent light away from the reflective pigment (F). A viewer of the coating sees one color on face (looking straight onto a coating composition) and a different color on flop (at an angle to the surface of the coating composition). On face to the coating composition, the appearance of the coating composition is dominated by the absorbance of the light by the colorants and reflected light (R). However, on flop, the appearance is dominated by the fluorescence of the colorants (F). Thus, there are two color effects that are produced depending on the viewing angle.

The O'Brill reference does not disclose a coating composition containing reflective pigment. Further, O'Brill does not disclose a coating composition having two color effects based on non-absorbed and absorbed wavelengths producing reflected and fluorescent light as a result of reflective pigments in the composition. Thus, the O'Brill reference does not disclose a coating composition that has one color on face and a different color on flop. In O'Brill, the color appearance exhibited depends on the type of light that illuminates the composition (i.e., black light produces a glowing effect at nighttime and a different appearance in the daytime). In contrast, the claimed invention exhibits two color appearances which is dependent on viewing angle. The glowing effect at night exhibited by the O'Brill composition is highly desirable for marking applications (see column 2, lines 13-35) because the markings should be visible at night regardless of the viewing angle.

Furthermore, in claim 15 of the claimed invention, it is recited that the size of the pigment particles is selected so that the pigment particles will not scatter light effectively. In the specification ([0019]) it is disclosed that such scattering would induce significant diffuse reflectance that would diminish the change perceived in color with differing viewing angles. In O'Brill there is no disclosure relating to the particle size of the fluorescent pigment particles.

Claims 16-17 and 21-25 depend from claim 15 and overcome this rejection for the same reasons stated above.

Applicants submit that the claimed coating composition of claims 15-17 and 21-25 is distinguishable from the marking composition disclosed in O'Brill and therefore this rejection should be withdrawn.

Claims 15-17, 21-23 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent 5,135,568 (Fasano). Applicants respectfully traverse this rejection.

Fasano discloses a fluorescent coating composition wherein hollow polymer particles are added to the composition to improve its fluorescence when exposed to ultraviolet light. Fasano does not disclose a coating composition containing reflective pigment. Further, Fasano does not disclose a coating

composition having two color effects based on non-absorbed and absorbed wavelengths producing reflected and fluorescent light as a result of reflective pigments in the composition. Thus, the Fasano reference does not disclose a coating composition that has one color on face and a different color on flop. Further, Fasano is directed to improving fluorescence and thus, there is no desirability for a coating composition that exhibits two different color effects depending on the viewing angle.

Claims 16, 17, 21-23 and 25 depend from claim 15. Claim 26 as amended is an independent claim and claim 27 depends from claim 26. For the same reasons as set forth above, claims 16, 17, 21-23 and 25-27 overcome Fasano.

Applicants submit that the claimed coating composition of claims 15-17, 21-23 and 25-27 is distinguishable from the fluorescent composition disclosed in Fasano and therefore this rejection should be withdrawn.

### **III. Conclusion**

Applicants submit that claims 15-37 are in condition for allowance and respectfully request issuance of a Notice of Allowance for these claims.

Respectfully submitted,

A handwritten signature in cursive script, reading "Carol A. Marmo", is written over a horizontal line.

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